

Partnerships: On-Farm and Along the Supply Chain

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Canada Grains Council

Canada's Industry-Led Food Safety Programs –
The Road Ahead

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Canada Grains Council

- Created in 1969 as an international market development tool
- Today provides an industry forum to examine policy options for Canada's grain industry
- 34 members including technology developers, seed growers/traders, producers, handlers, processors, merchants, exporters, service industry, federal and provincial governments and agencies

Canada Grains Council Projects

National scope / cross commodity lines / value chain

- On Farm Food Safety
- Post Farm Food Safety
- Strategic Plan involving Traceability, Food Safety and Quality Assurance
- IP Food Safety Pilot Projects: wheat, malting barley, canola, mustard, non-GMO soybean
- Grain Trade Advocacy: Biosafety Protocol, CODEX; International Grain Trade Coalition (IGTC), Global AP Coalition (GAPC)
- Commercialization of Innovation

Bulk Grain Handling System

- Most grain in Canada is handled and transported in bulk
- Characterized by high volumes, low cost
- Products of like quality are combined together, stored and transported in ever increasing sized lots: 40 tonne producer truck to minimum 5,000 tonne holds in 60,000 tonne vessels
- Normally identity of producer's grain lost

On-Farm Food Safety

- 2001 CGC formed On-farm Food Safety Management Committee
- Created Strategic Plan recommending:
 - Development of On-Farm HACCP based food safety module for Canadian grains, oilseeds, pulses and special crop farms
 - The CGC develop HACCP based food safety modules for other links in value chain: trucks, primary elevators, railways, terminal elevators, lake freight, transfer elevators (No sense implementing farm program unless integrity of product could be maintained to food processor or point of export)
- 2006 On-farm HACCP based technical module and producer manual pass Technical Review

On-Farm Food Safety Implementation

- Management Committee implementing 2-phase implementation approach:
 - **Phase I:** Food safety manual to be available to grains, oilseeds, pulses and special crop producers and companies for incorporation into Identity Preserved production contracts as markets demand: **Implemented**
 - **Phase II:** Management Committee to develop business plan for a national management system to have capacity to provide HACCP based on farm food safety certification to Canadian grains, oilseeds, pulses and special crop farms: **Business plan being developed. Will be implemented when Management Committee believes there is sufficient producer interest to warrant implementation**

Post-Farm Food Safety Implementation

- CGC has developed HACCP based food safety modules for each link of grain chain from farmer to domestic food processor or export vessel namely: truck, primary elevator, rail, terminal, lake freight and transfer elevator
- Modules were developed by a Post-Farm Management Committee composed of representatives from each link
- No Technical Review process: Each company sought individual facility certification
- Most of Canada's grain elevator system is now ISO/HACCP certified

2005-06 Pilot Projects

- Designed to determine operational and cost implications of introducing HACCP based food safety certification to domestic and export grain sales
- 5 pilots: All IP contracts: wheat / malting barley / canola / non-GMO soybeans / mustard
- Pilot Management Committee formed to represent multi commodity value chain including government (about 45):
 - commodity specific management committees formed to represent specific commodity value chain e.g. farmers, elevators, domestic processors, government, exporters, buyers e.g. wheat -Warburton Bakery UK; malting barley – malting barley companies; canola – Japanese trading company

Pilots: Lessons Learned

- Operationally feasible within IP contract system for both container and bulk shipments
- Operationally difficult within traditional non-IP bulk system. For integrity to be maintained must keep HACCP grain separate from non-HACCP by grade. Would require additional bins and possibly dedicated facilities
- Costs varied significantly farmer to farmer depending upon farm management and current record keeping systems
- Most farmers required few operational changes: biggest challenge occurred in meeting record keeping requirements
- Better the farmer training; better the results
- Most effective training formula: one on one discussion followed by post harvest gap analysis audit to review performance and identify steps required for farmer to become compliant

Pilot Project Conclusions

- Food Safety planning and implementation requires total value chain participation
- Food Safety must be market pulled: No premium-no participation:
 - Wheat participation low until Warburton's wrote letter confirming importance of pilot to British market
 - Non-GMO participation high because exporters believed HACCP certification of benefit to expanding Japanese and EU food grade soybean markets
- Current food safety market small = niche markets
 - No interest in feed market to pay premium for HACCP based malting barley produced in malting pilot that graded feed grain

Food Safety = Identity Preserved

- Unless all grain becomes HACCP certified, on-farm HACCP grain requires IP system to maintain HACCP integrity through handling and transportation chain to domestic and export markets
- All grain companies utilize IP systems within bulk handling system: malting barley, Warburton wheat, Navigator durum, Nexera canola, organic products etc.
- Normally used to satisfy niche markets
- IP contracts may or may not have food safety/traceability
- IP market demand growing – with and without food safety and traceability- for all commodities
- Introduction of new varieties designed to meet specific industrial end uses (biofuels / plastics) will increase IP demand

IP Systems Require Premiums

- IP demand driven by customers willing to pay premium prices for more specific quality specifications than provided in traditional grades
- Size of premiums determined in contract negotiations
- IP costs money: market must be prepared to pay premium
 - More sophisticated operational and management protocols
 - Greater risk of not meeting contract specifications
 - Loss of efficiency of bulk system
 - More IP contracts: less efficiency of bulk system
- Higher purity: higher premium

Challenges to Road Ahead for Introduction of HACCP to Canadian Grain Farms

- Little or no market premiums for HACCP grain means low participation rate by Canadian grain farmers – participation restricted to few farmers involved in niche markets
- Current government programs do not support program maintenance nor administrative implementation costs – currency of HACCP model may falter and program may fall from radar screen
- Without government support, costs of program administration and on-farm audits may prevent implementation of national management system to provide on-farm certification of grain, oilseed, pulse and special crops farms despite potential benefits

Recommendations

Federal, provincial, territorial governments should cost share on-farm HACCP program administration implementation, farmer training and audit costs

- Provides important public benefit
- Increases participation rates significantly
- Enables Canada to “brand” Canadian grain as “HACCP produced”
- Provides support to Canadian farmers as a “Green” expenditure under WTO – no restrictions
- Enhances competitiveness of Canadian grain

Thank you